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Serial No.: 09/723,000

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-47. (Cancelled)

- 48. (Currently amended) A method for determining the predisposition of a rheumatoid arthritis patient to develop severe disease, said method comprising:
- a) comparing the frequency of CD4⁺/CD28^{null} cells in said patient to a reference frequency to obtain information about said rheumatoid arthritis condition, and
- b) determining if said patient is predisposed to develop severe disease based on said information and the presence or absence of a polymorphism in an HLA-DRB1 allele in said patient, wherein said HLA-DRB1 allele is an HLA-DRB1 *0401 allele, an HLA-DRB1 *0404 allele, an HLA-DRB1 *0405 allele, or an HLA-DRB1 *0408 allele.
- 49. (Previously presented) The method of claim 48, wherein said frequency of CD4⁺/CD28^{null} cells comprises the percent of CD4⁺ cells that are CD28 negative.
- 50. (Previously presented) The method of claim 48, wherein said reference frequency is derived from the CD4⁺/CD28^{null} cell frequency from a population.
- 51. (Previously presented) The method of claim 50, wherein said population comprises a population of patients having a diffuse rheumatoid arthritis condition.
- 52. (Previously presented) The method of claim 50, wherein said population comprises a population of patients having a follicular rheumatoid arthritis condition.



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53. (Previously presented) The method of claim 50, wherein said population comprises a population of patients having a granulomatous rheumatoid arthritis condition.

- 54. (Previously presented) The method of claim 50, wherein said population comprises a population of healthy individuals.
- 55. (Previously presented) The method of claim 50, wherein said population comprises a population of patients having subcutaneous nodules.
- 56. (Previously presented) The method of claim 50, wherein said population comprises a population of patients having extra-articular involvement.
- 57. (Previously presented) The method of claim 50, wherein said population comprises a population of patients having major joint destruction.

58-59. (Cancelled)

- 60. (Currently amended) A method for determining the predisposition of a rheumatoid arthritis patient to develop severe disease, said method comprising:
 - a) determining the frequency of CD4⁺/CD28^{null} cells in said patient,
- b) determining the presence or absence of a polymorphism in an HLA-DRB1 allele in said patient, wherein said HLA-DRB1 allele is an HLA-DRB1 *0401 allele, an HLA-DRB1 *0404 allele, an HLA-DRB1 *0405 allele, or an HLA-DRB1 *0408 allele,
- c) comparing said frequency of CD4⁺/CD28^{null} cells to a reference frequency to obtain information about said rheumatoid arthritis condition, and
- d) determining if said patient is predisposed to develop severe disease based on said information and said presence or absence of said <u>HLA-DRB1 allele polymorphism</u>.

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- 61. (Currently amended) A kit for determining the predisposition of a rheumatoid arthritis patient to develop severe disease, said kit comprising:
- a) a first binding pair member, wherein said first binding pair member has specific binding affinity for a CD4⁺/CD28^{null} cell marker such that the frequency of CD4⁺/CD28^{null} cells in said patient is determinable, and
- b) an oligonucleotide primer, wherein said oligonucleotide primer has specific binding affinity for at least a portion of the locus containing an HLA-DRB1 allele such that the <u>presence or absence of an HLA-DRB1 *0401 allele</u>, an HLA-DRB1 *0404 allele, an HLA-DRB1 *0405 allele, or an HLA-DRB1 *0408 allele a polymorphism of said HLA-DRB1 allele in said patient is determinable.
- 62. (Currently amended) The kit of claim 61, wherein said kit comprises a reference chart, wherein said reference chart contains information about CD4⁺/CD28^{null} cell frequencies such that said predisposition is determinable based on said frequency of CD4⁺/CD28^{null} cells in said patient and said presence or absence of said HLA-DRB1 *0401 allele, said HLA-DRB1 *0404 allele, said HLA-DRB1 *0405 allele, or said HLA-DRB1 *0408 allele polymorphism of said HLA-DRB1 allele.